

COMPUTATION REDUCTION IN OFDM SYSTEM USING FREQUENCY DOMAIN PROCESSING

Abstract of the Disclosure

5 Improved systems and methods for implementing Orthogonal Frequency
Division Multiplexing (OFDM) systems and for computing Fast Fourier Transforms
(FFT) having strictly real outputs are provided. Systems and methods are provided for
efficiently implementing an Inverse Fast Fourier Transform (IFFT) with complex inputs
and real outputs. Filtering and upconversion are performed in the frequency domain to
10 simplify digital time domain processing and generally reduce complexity.

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